DOCUMENT RESUME

ED 252 031 EC 171 188

AUTHOR Spragg, Paul A.
TITLE Counseling the Mentally Retarded: A Psychoeducational Perspective.
PUB DATE May 84
NOTE 22p.; Paper presented at the Annual Meeting of the American Association on Mental Deficiency (108th, Minneapolis, MN, May 27-31, 1984).
PUB TYPE Speeches/Conference Papers (150) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Development; *Counseling Techniques; *Learning Processes; *Mental Retardation; Metacognition; Program Evaluation; *Psychoeducational Methods; Self Evaluation (Individuals); Student Evaluation

ABSTRACT

The paper suggests that a cognitive or psychoeducational perspective is valuable in counseling mentally retarded individuals. Psychoeducational considerations in pretreatment assessment, with an emphasis on process rather than product, are noted; and it is explained that counseling of mentally retarded persons can be enhanced through the use of techniques to maximize learning efficiency. Cognitive foundations of therapeutic communication are discussed, and suggestions are offered from research on attention, input organization, and memory and recall. A learning perspective focuses on effects of client expectations and motivation, factors influencing the acquisition of behaviors, and metacognitive treatment strategies. Difficulties in measuring counseling outcomes with the mentally retarded are described, and the value of objectively rated criterion referenced tests based on behaviorally-anchored constructs most applicable to the mentally retarded is considered. (CL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED252031

Counseling the Mentally Retarded: A Psychoeducational Perspective

Paul A. Spragg

Weld County Community Center Foundation

Evans, Colorado

Portions of this paper were presented at the 108th annual meeting of the American Association on Mental Deficiency, Minneapolis, May 1984.

EC171188

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Paul A. Spragg
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Counseling the Mentally Retarded:

A Psychoeducational Perspective

The transition from relatively sheltered, closely supervised residential and program environments to community living is an emotionally demanding one for most mentally retarded individuals. It is a particular problem for those who historically have had difficulty adapting to differing degrees of structure or in maintaining consistent patterns of socially acceptable behavior across a variety of settings. There are many examples of persons living in "normalized" environments who may never actually achieve independent living because they lack the coping skills necessary to deal with new situations autonomously and in a constructive manner.

One less fortunate impact of the deinstitutionalization movement has been an increasing awareness that many behavior management techniques useful in controlled environments have only limited applicability to "real world" type problems. Not only are mentally retarded individuals underserved with respect to availability of mental health services (Reiss, Levitan, & McNally, 1982), serious questions exist as to the range of effective, alternative psychologic interventions. While many authors agree that counseling and psychotherapeutic procedures are of benefit to retarded persons (Sternlicht, 1966; Bialer, 1967; Gunzburg, 1974), there are many limitations associated with the use of traditional techniques with this population.

First, successful psychotherapeutic treatment of the mentally retarded individual is by no means a consistent or even typical finding. There is scant evidence that psychodynamic or non-directive approaches are of appreciable value (Spragg, Note 1), based not only on the theoretical assumptions underlying these approaches but also because they have almost uniformly failed to demonstrate reliable changes as a result of treatment. Directed treatment strategies

the predominate counseling mode, seem to fare better but overall the findings remain equivocal. This is partly because of the many methodological flaws characteristic of the studies reported (Browning & Keesey, 1974).

Secondly, when validly measured, the observed effects of counseling mentally retarded individuals are typically modest. While it is true that our current evaluative strategies are unsophisticated in this respect, as a general statement it may be said that, at least on the scale required, treatment is at this point neither practical nor cost-effective. The power of these techniques and/or the sensitivity of the measures employed must be dramatically increased if they are to secure a legitimate place in treatment of the mentally retarded. In particular, problems of maintenance and generalization of treatment effects need to be addressed.

Lastly, since counseling with the retarded requires at least some flexibility and inventiveness, many forms of directed treatment with this population have been manifestly eclectic in nature. However, the many trial-and-error approaches to treatment reported in the literature clearly indicates a need for a more comprehensive and systematic approach to the problem (Spragg, Note 1).

While definitions of counseling vary greatly, most approaches are fundamentally educational in nature; that is, knowledge is imparted to the client by the therapist. Communication and learning, then, are two important treatment variables. In this paper, it is argued that a cognitive or psychoeducational perspective of these factors and others may have an important contribution to make in the assessment and psychological treatment of mentally retarded persons.

Psychoeducational Considerations in Pre-Treatment Assessment

Broadly speaking, pre-counseling assessment of the retarded client focuses primarily on the emotional/behavioral characteristics of the client, the nature of the presenting problem, and an assessment of social-environmental factors (Loschen, 1975). In this respect, it does not differ greatly from assessment of non-retarded individuals. The establishment of treatment goals and the development of a treatment plan are based on these considerations which are generally interpreted within the context of the therapist's own training and experience. Relatively little attention, however, is paid to the evaluation of factors having a bearing on therapeutic communication and learning.

Since learning is an essential aspect of the counseling process, the manner in which a client learns is useful information to obtain. Mentally retarded individuals are by no means homogeneous in this respect, as there are many possible causes and sequelae of cognitive dysfunction (Brooks & McCauley, 1984). This fact is frequently ignored due to the over-riding emphasis on IQ (or learning rate). Since IQ is a global measure of many different apsects of learning, it alone is not a particularly useful piece of information.

A psychoeducational approach to learning, on the other hand, places more emphasis on processes and less on products. The assessment of learning style, for example, might include an evaluation of attentional processes, visual and auditory discrimination skills, verbal and non-verbal modes of communication, impulsive vs. reflective responding, and other relevent factors. While an assessment of learning processes can be typically quite time consuming (e.g., Feuerstein, 1979), even a brief examination of some aspects can results in a more efficient mode of therapeutic communication and ultimately more efficient treatment.

Treatment from the Psychoeducational Perspective

It seems remarkable that, on the whole, references to allied fields such as learning and development are largely absent from studies evaluating the effectiveness of different therapeutic models designed for the mentally retarded. It is, after all, essentially these variables that differentiate the retarded from the non-retarded. Perhaps more accurately, inefficiency in cognitive processing appears to be the distinguishing feature of retarded persons (Brooks & McCauley, 1984). It follows that counseling treatment of the retarded could be greatly enhanced when techniques are implemented in ways that maximize learning efficiency.

Cognitive Foundations of Therapeutic Communication

Much of the literature in counseling the mentally retarded is characterized by greatly simplified or "scaled down" versions of more traditional techniques such as reality therapy, TA, and psychodrama (Spragg, Note 1). It is axiomatic that treatment is facilitated with the use of concrete terminology, the gradual introduction of novel concepts, repetition, and immediate and unambiguous feedback (DeMartino, 1957; Vance, McGee, & Finkle, 1977; Yepsen, 1952). Since mentally retarded clients tend to be distractible, relatively brief but frequent counseling sessions are recommended (Vance et al., 1977). However, there has been a tendency to oversimplify the problems involved in information processing and retrieval with the retarded client; consequently, the usual remedies may only be marginally effective.

Attention. The matter of attentional deficits, for example, is of vital significance and deserves more consideration in counseling. No other single deficit in the mentally retarded is better supported by research findings (Detterman, 1979). While it appears to be generally understood that the initial phases of treatment may have to focus on the acquisition of basic attentional skills (e.g., eye contact and on-task behavior), other, possibly more useful strategies are ignored.

Attention theory as set forth by Zeaman and House (1963, 1979), for example, postulates that the attentional deficits characteristic of the retarded are related primarily to the inability to adequately sample a given stimulus field and to select the relevent stimulus. Perceptions are blurred and sweeping, while exploratory behavior is consequently unplanned, impulsive, and unsystematic (Feuerstein, Rand, & Hoffman, 1980). If it is true that mentally retarded individuals use only some of the relevent cues in problem solving activities (or attend to irrelevent cues), it is very likely that problems are present in attending to cues discriminative for certain patterns of social and interpersonal behaviors. It is equally likely that different clients will utilize different cues in making social judgements and emotional responses (Spragg, 1983).

The implications for treatment are fairly obvious. Counseling strategies can be enhanced by task analyzing the relevent aspects of a given task or social problem, de-emphasizing the irrelevent dimensions of the problem, and increasing the perceptual salience of the relevent cues (auditory, visual, etc.). Information is thus provided in a concise, unambiguous, and highly discriminable fashion.

As just one example, it has recently been suggested (Savitsky & Eby, 1979) that individuals who are insensitive to negative emotion cues can be expected to violate the guidelines that typically define acceptable behavior. There is also data indicating that social-behavioral adjustment is related to the ability to discriminate among emotions in children. This is the underlying assumption of one structured counseling approach used with mentally retarded adults that focuses on affective development (Bell, Corcoran, Delaney, Kirchner, & Levinson, 1976). An evaluation of this model, which emphasizes perceptual enhancement of relevent affective cues in a variety of modes, suggests that even moderately

retarded individuals are able to significantly improve gross affective discrimination skills (Spragg, 1983). While behavioral changes occuring as a result of treatment have yet to be empirically established, the model offers an intriguing line of inquiry.

Input Organization. It is also likely that therapeutic communication can be improved if care is taken to organize the presentation of material in ways that can be easily coded and processed by the retarded client. Organized information is also more likely to be retained and recalled (Spitz, 1966). This appears to be at least one reason for the disappointing results of non-directive techniques with the mentally retarded (e.g., Albini & Dinitz, 1965; Fine, 1969; & Gorlow, Butler, Einig, & Smith, 1963).

More specific inferences may be drawn from the work of learning theorists in this area (Mercer & Snell, 1977). First, information that is grouped or ordered is likely to be processed more efficiently than material presented randomly (e.g., non-directively). Only one problem or topic sould be discussed at a time and it should be logically connected to previously learned material whenever possible (Denny, 1966). Some "social skills counseling" approaches, for example, are based on a highly structured curricula covering a variety of specific topics (Lee, Note 2; Zisfein & Rosen, 1973).

Secondly, information that is imparted to the client should be done as concisely as possible, using simple labels whenever feasible. One approach that comes to mind, for example, uses the terms "O.K." and "weird" to refer to appropriate and inappropriate behaviors, respectively (Lee, Note 2). Processing of information is also enhanced when a number of examples are provided so that the relevent aspects of a problem can be isolated by the client (Brooks & McCauley, 1984).

There is also some evidence that mentally retarded individuals express definite preferences for therapeutic activities in specific sensory modalities, probably dictated to some extent by strengths in corresponding learning channels (Spragg, 1983). Providing redundant cues in these modalities is more likely to hold interest and attention, again leading to more efficient information processing.

Finally, the simultaneous use of different forms of sensory input facilitates the coding of information and the integration of all relevent "bits" of information. Several authors have found that use of audio-visual material in treatment can be a useful strategy (Ricker & Pinkard, Note 3; Ucer, Gaulden, & Mazzeo, 1968). Asking the client to verbalize his or her actions during role-play and problem-solving activities also assists in the organization of information (Brooks & McCauley, 1984).

Memory and Recall. Mentally retarded persons are also deficient in most, if not all, memory processes and stores (Detterman, 1979). Thus, the importance of repetition and over-learning in treatment is frequently emphasized, although there are some drawbacks. The use of drills, for example, is an unpalatable strategy even for directive therapists, valuable treatment time is wasted, and clients quickly lose interest. Massed practice, in particular, should be avoided because it tends to retard learning (Denny, 1966).

There is, however, a place for the spaced or distributed review and practice of information. Perhaps as much as one-third of each session should be devoted to review of previously learned material (Bell et al., 1976). Other helpful therapeutic strategies for improving retention include showing the client the advantages of remembering certain material, and some likely consequences of forgetting it. While the therapist often takes responsibility

for summarizing the session, asking the client to do so instead affords an opportunity to assess the degree to which the relevent aspects of a problem have been communicated and retained. Homework assignments can be helpful in the maintenance of information from one session to the next, while providing salient cues and caretaker prompts in residential settings can also serve as memory aides.

In one widely accepted model of memory in retarded persons, it is argued that deficits in short-term retention are primarily due to inadequate rehearsal and retrieval strategies (Ellis, 1970). In fact, a variety of rehearsal strategies are possible to teach mentally retarded individuals (Glidden, 1979). While the practical applications of some of these laboratory findings are at present somewhat limited, the prudent therapist may do well to at least consider experimenting with various mnemonic devices and other memory aides in treatment.

Performance Variables

While therapeutic learning is determined in part by cognitive variables, successful treatment is defined by the actual performance of retarded clients. Variables that influence a client's behavior directly may also be viewed from a learning perspective. These include expectancies, motivation, factors influencing the acquisition of behaviors (treatment techniques); maintenance, transfer and generalization of treatment effects.

Client Expectancies and Motivation. Social learning theory conceptualizes performance as being a function of both expectancies and reinforcement value (Rotter, 1975). Loosely defined, expectancies constitute a set of perceptions based on past history and the present situation, while the value of the reinforcer is state specific and serves as an additional motivating factor. Both need to be addressed in treatment.

The typical mentally retarded client enters into treatment with a long history of failure experiences, and consequently higher generalized expectancies for failure (Balla & Zigler, 1979). Because client expectancies are believed to be one significant determinant of therapeutic outcome (Murray & Jacobson, 1971), the retarded client's failure orientation will impede therapeutic learning and negatively impact treatment as a whole. Counseling, which is a novel activity for most mentally retarded individuals, is consequently very susceptible to generalized expectancies (Rotter, 1975). Therefore, it is extremely important for the therapist to focus initially on the creation of positive therapeutic expectancies. Clients should experience as many successes as possible in the early stages of treatment (Spragg, 1983), although it is also important to arrange them in a challenging and realistic manner (Mercer and Snell, 1977).

Treatment itself needs to be viewed as a reinforcing event by the retarded client. It is frequently overlooked that few mentally retarded clients are self-referred; some do not even recognize that they have problems requiring attention. It is not surprising that many lack incentive for participation in treatment and for the effort required to achieve behavior changes. Like anyone else, the retarded client must have a good reason for taking time out from preferred activities.

In most cases, it is the novelty of the treatment environment and the increased attention that attract the mentally retarded client initially. This can be a very temporary state of affairs in many cases, however, as most clinicians experienced in working with the retarded can attest. Therapists will generally need to be aware of the most salient reinforcers for their individual clients, and will need to create an environment rich in social reinforcement and novel activities. The judicious use of humor, specially designed games, and field trips not only tends to capture and

maintain interest but has the added benefits of encouraging participation and reducing attrition (Spragg & Miller, Note 4). Important points can often be made more meaningfully. Finally, throughout the course of treatment, there should be an emphasis on the acquisition of behaviors that will maximize naturally-occuring positive consequences, which is also helpful in maintenance outside the therapeutic environment.

Acquiring Alternative Responses. At the root of many problems presented by the behaviorally disordered, mentally retarded clients are deficits in adaptive behaviors rather than emotional disturbances per se. Most therapists will be compelled to spend significant amounts of time increasing their client's repertoire of appropriate, competing behavioral alternatives.

Because most of these behaviors are interpersonal in nature, it is often convenient to run therapeutic groups. Indeed, this is the predominate therapeutic mode with the mentally retarded. There are certain practical advantages from a cost-effectiveness standpoint as well, but the emphasis is primarily due to the fact that social learning is enhanced under these conditions (Spragg, Note 5). The most commonly used techniques include modeling and role-play activities.

The emphasis on such techniques means that the therapist should be well grounded in social learning theory (Bandura, 1977), basic principles of observational learning (e.g., Bandura , 1969; Mercer & Snell, 1977), and most especially in social skills training applications with the mentally retarded (

). There has been a virtual explosion in research in this last area over the last several years that would seem to have many relevent counseling applications, not only in interpersonal skills, but in group process skills as well (e.g., verbal and non-verbal conversational skills, cooperative behaviors, responding to criticism and confrontation, etc.).

While the importance of social learning is generally acknowledged in counseling treatment, less attention is given to other, equally critical areas including transfer from the treatment setting, generalization, discrimination, and maintenance. Basic learning principles apply in all these cases.

Transfer of appropriate behaviors from the treatment setting to other environments can be facilitated through the use of controlled exposures and practice in naturalistic settings (Matson & Earnhart, 1981). The fact that many retarded persons spend a great deal of their time in the care of others suggests that both the problems of transfer and maintenance can be somewhat offset when significant others are involved in the treatment plan (Spragg, Note 6).

It is also important to introduce discrimination training at some point during social skills training exercises. Mentally retarded persons need to become sensitized to the contextual aspects of appropriate behavior; that is, which behaviors are appropriate for what circumstances. Cues used as discriminative stimuli in these cases should differ significantly from each other, as in the case of teaching different behavioral responses in relationship to the non-verbal cues of others (e.g., "empathy" training). Conversely, generalization of behaviors is enhanced by teaching the behavior in a variety of contexts which vary irrelevent cues but keep the relevent cues constant (Denny, 1966).

Metacognitive Treatment Strategies. From a counseling perspective, however, behavior change is seldom viewed as an end in itself. There is nearly always an implicit emphasis on attaining global or fundamental changes in how one perceives or evaluates oneself and his or her environment. Such covert events, however, are also partially determined by cognitive operations, and properly fall within the province of learning (although not exclusively so).

Even some personality characteristics of the retarded are evidently functions of retarded learning. For example, outerdirectedness, defined as an excessive reliance on external cues to govern behavior (Balla & Zigler, 1979; Zigler, 1966), appears to be related to impulsivity, an external control locus (Mercer & Snell, 1977; Weisz, 1979), and most probably dependency and learned helplessness as well. Such problems may be better addressed from a cognitive rather than a dynamic perspective.

If anything is actually taught in counseling, perhaps it should be how to cope more effectively with one's psychological surroundings. Development of a coping skill is essentially learning the ability to independently generate solutions to problematic interpersonal situations and to then respond in an effective manner. These are largely dependent on the acquisition of metacognitive strategies, "processes that reflect, by definition, awareness of, monitoring of, or attention to one's own sets of cognitive operations and strategies" (Brooks & McCauley, 1984, p. 480). Two potentially crucial metacognitive operations to be addressed in treatment are problem solving and self-regulation.

The extent to which outerdirectedness can be modified via instruction in problem solving strategies is currently the focus of much research activity in educational settings for the mentally retarded (Brooks & McCauley, 1984). Problem solving is also a well established counseling technique (Heppner, 1978). While therapeutic applications with the mentally retarded have yet to be systematically evaluated, there is some evidence that retarded clients are able to learn and apply rudimentary problem solving strategies in treatment (Spragg & Miller, Note 4).

In addition to their potential as one form of coping strategy, problem solving activities show promise in other areas of treatment. They can, for example, be employed jointly by the therapist and client to derive specific

and realistic treatment goals. They also provide practice in planning and thinking through problems, which helps restrain impulsivity. When care is taken to adequately structure the problem solving process and to gradually fade out supporting cues, all of these operations tend to increase reliance on self and reduce outerdirectedness (Borkowski & Cavanaugh, 1979; Brooks & McCauley, 1984; Mercer & Snell, 1977).

Some of the newer cognitive-behavioral techniques may also eventually find a permanent niche in counseling treatment of retarded persons. Even TMR children, for example, have been successfully trained in the basic, component parts of self-regulatory mechanisms such as self-monitoring, self-evaluating, and self-reinforcement (Spragg, Note 6). Therapists seeking maximum transfer of skills from treatment settings to other environments would be wise to incorporate these processes in treatment plans.

Through the creative use of both problem solving and self regulatory training, it is theoretically possible for mentally retarded clients to enhance general coping skills and to respond appropriately to novel or problematic interpersonal situations. This may not only turn out to be an extremely potent therapeutic combination, but an efficient and cost-effective one as well. While more research is needed, there is, in addition, evidence that under the right conditions (e.g., training on multiple tasks) such metacognitive strategic behaviors are both persistent and generalizable (Borkowski & Cavanaugh, 1979), resulting in lasting behavior changes.

Outcome Assessment

In a sense, the measurement of counseling outcomes with the mentally retarded is the most difficult aspect of the treatment process. Consistently, studies have noted "insensitivity" of dependent measures as a major reason for the failure to obtain significant, positive findings. Widely available attitude scales, personality inventories, and other self-report measures are

plagued with both reliability and validity problems when applied to the mentally retarded (Spragg, Note 7). Yet, clinicians are finding themselves held increasingly accountible for the effectiveness of their interventions.

Specification of goal behaviors in observable and measureable terms is by far the most accurate means of evaluating the results of treatment. However, what one gains in accuracy of data by targeting a few discrete behaviors is lost in terms of the measurement of extent and generality of change. There is, after all, no particular advantage to counseling if other techniques can be shown to result in the same behavioral outcomes more efficiently. Global ratings of behavior change (i.e., behavior checklists), unfortunately, are typically not sufficiently sensitive to specific areas of interest (Spragg, 1983). The use of structured situation test, videotaped ratings, and other "in-vivo" ratings of behavior also suffer from serious psychometric problems (Bellack, 1979).

A sensible alternative might be found in educational/habilitative models of assessment, specifically, the development of a series of objectively-rated, criterion-referenced tests based on behaviorally-anchored constructs most applicable to the mentally retarded. Such constructs might include assertiveness, anxiety, outerdirectedness, interpersonal skills, problem-solving skills, impulsivity, dependency, etc. These measures could be designed in such a fashion that they do not unnecessarily restrict the scope of post-treatment assessment and yet maintain most of the advantages of behavioral assessment. Since they are not generally subject to test reactivity in the way self-report measures are, they could also be validly used as a measure of treatment progress, transfer, generalization, and follow-up.

Summary

It is the author's opinion that whether or not there will continue to be a place for counseling and related techniques in the treatment of retarded persons depends in large measure how creative and flexible therapists can be in integrating findings from other fields. The foregoing discussion, for example, is based on the premise that learning and cognition are inextricably bound up with both emotional and behavioral development, and consequently also with the resolution of problems arising in these areas. Similar arguments can doubtless be made in other areas (e.g., Piagetian theory). All have applicability to the extent that they make treatment more effective, efficient, and germane to the needs of retarded persons.

Much of what has been said is admittledly speculative. Unfortunately, there is little if any research as yet bearing directly on the learning processes of the mentally retarded client in a counseling setting. The purpose of this paper has been primarily to stimulate thinking in this area, based on what is already known about the performance of retarded individuals in laboratory and educational settings.

The therapist who makes use of the techniques and strategies suggested in this paper does not necessarily restrict him/herself with respect to a preferred treatment approach or school. On the contrary, they may enhance the effectiveness of virtually any therapeutic alternative presently available. It need only be said that while it is within the prerogative of the therapist to select a course of treatment, he/she carries a responsibility to determine the means by which to maximize the potential benefits of that treatment.

Reference Notes

1. Spragg, P. A. Counseling approaches with retarded persons: Current status and an attempt at integration. Paper presented at the Region IV Conference of the American Association on Mental Deficiency, Snowmass, Colorado, October, 1983.

2. Lee, D. Y. Social adjustment training: A group counseling manual for the mentally retarded. Unpublished manuscript, 1976.

3. Ricker, L. H. and Pinkard, C. M. Three approaches to group counseling involving motion pictures with mentally retarded adults. Proceedings of the International Copenhagen Congress on the Scientific Study of Mental Retardation, 1964, 2, 714-717.

4. Spragg, P. A. & Miller, C. Counseling mentally retarded couples. Paper presented at the 106th annual meeting of the American Association on Mental Deficiency, Boston, May 1982.

5. Spragg, P. A. Counseling the developmentally disabled. Invited address, Colorado Divisions of Developmental Disabilities and Mental Health, Evans, Colorado, May 1981.

6. Spragg, P. A. Counseling and psychotherapeutic procedures with the mentally retarded: A review and critique. Paper presented at the 15th International Conference on the Handicapped and Developmental Disabilities, Moscow, U.S.S.R., June 1983.

7. Spragg, P. A. In search of . . . measures of psychological adjustment and change in the mentally retarded. Manuscript in preparation.

References

Albini, J., & Dinitz, S. Psychotherapy with disturbed and defective children. American Journal of Mental Deficiency, 1965, 69, 560-567.

Balla, D., & Zigler, E. Personality development in retarded persons. In N. R. Ellis (Ed.), Handbook of mental deficiency, psychological theory and research Hillsdale, N. J.: Lawrence Erlbaum Associates, 1979.

Bandura, A. Principles of behavior modification. New York: Holt, Rinehart, & Winston, 1969.

Bandura, A. Social learning theory. Englewood Cliffs: Prentice-Hall, 1977.

Bell, B. A., Corcoran, J. R., Delaney, R. J., Kirchner, K. R., & Levinson, W. S. Affect abilities training. Office of Developmental Disabilities, HEW, Region 8, 1976.

Bellack, A. S. A critical appraisal of strategies for assessing social skill. Journal of Behavioral Assessment, 1979, 1, 157-176.

Bialer, I. Psychotherapy and other adjustment techniques with the mentally retarded. In A. A. Baumeister (Ed.), Mental retardation: Appraisal, education, and rehabilitation. Chicago: Aldine, 1967.

Borkowski, J. G., & Cavanaugh, J. C. Maintenance and generalization of skills and strategies by the retarded. In N. R. Ellis (Ed.), Handbook of mental deficiency, psychological theory and research. Hillsdale: Lawrence Erlbaum Associates, 1979.

Brooks, P. H., & McCauley, C. Cognitive research in mental retardation. American Journal of Mental Deficiency, 1984, 88, 479-486.

Browning, P. L., & Keesey, M. Outcome studies on counseling with the retarded: A methodological critique. In P. L. Browning (Ed.), Mental retardation: Rehabilitation and counseling. Springfield: C. C. Thomas, 1974.

DeMartino, M. F. Some observations concerning psychotherapeutic techniques with the mentally retarded. In C. L. Stacey and M. F. DeMartino (Eds.), Counseling and psychotherapy with the mentally retarded. Glencoe: The Free Press, 1957.

Denny, M. R. A theoretical analysis and its application to training the mentally retarded. In N. R. Ellis (Ed.), International review of research in mental retardation (Vol. 2). New York: Academic Press, 1966.

Detterman, D. K. Memory in the mentally retarded. In N. R. Ellis (Ed.), Handbook of mental deficiency, psychological theory and research. Hillsdale: Lawrence Erlbaum Associates, 1979.

Ellis, N. R. Memory processes in retardates and normals. In N. R. Ellis (Ed.), International review of research in mental retardation (Vol. 4). New York: Academic Press, 1970.

Feuerstein, R. The dynamic assessment of retarded performers. Baltimore: University Park Press, 1979.

Feuerstein, R., Rand, Y., Hoffman, M., & Miller, R. Instrumental enrichment: An intervention program for cognitive modifiability. Baltimore: University Park Press, 1980.

Fine, M. J. Counseling with the educable mentally retarded. Training School Bulletin, 1969, 66, 105-110.

Glidden, L. M. Training of learning and memory in retarded persons: Strategies, techniques, and teaching tools. In N. R. Ellis (Ed.), Handbook of mental deficiency, psychological theory and research. Hillsdale: Lawrence Erlbaum Associates, 1979.

Gorlow, L., Butler, A., Einig, K. G., & Smith, J. A. An appraisal of self-attitudes and behavior following group psychotherapy with retarded young adults. American Journal of Mental Deficiency, 1963, 67, 893-898.

Gunzburg, H. C. Psychotherapy. In A. M. Clarke and A. D. B. Clarke (Eds.) Mental deficiency: The changing outlook (3rd. ed.) New York: The Free Press, 1974.

Heppner, P. P. A review of the problem solving literature and its relationship to the counseling process. Journal of Counseling Psychology, 1978, 25, 366-375.

Loschen, E. L. Failures in diagnosis and treatment in mental retardation. Mental Retardation, 1975, 13(3), 20-31.

Matson, J. L., & Earnhart, T. Programming treatment effects to the natural environment: A procedure for training institutionalized retarded adults. Behavior Modification, 1981, 5, 27-38.

Mercer, C. D., & Snell, M. E. Learning theory research in mental retardation: Implications for teaching. Columbus: C. E. Merrill, 1977.

Murray, E. J., & Jacobson, L. I. The nature of learning in traditional and behavioral psychotherapy. In A. E. Bergin and S. L. Garfield (Eds.), Handbook of psychotherapy and behavior change. New York: John Wiley & Sons, 1971.

Reiss, S., Levitan, G. W., & McNally, R. J. Emotionally disturbed mentally retarded people: An underserved population. American Psychologist, 1982, 37, 361-367.

Rotter, J. B. Some problems and misconceptions related to the construct of internal versus external control of reinforcement. Journal of Consulting and Clinical Psychology, 1975, 43, 56-67.

Savitsky, J. C., & Eby, T. Emotion awareness and antisocial behavior. In C. E. Izard (Ed.), Emotions in personality and psychopathology. New York: Plenum Press, 1979.

Spitz, H. H. The role of input organization in the learning and memory of mental retardates. In N. R. Ellis (Ed.), International review of research in mental retardation (Vol. 2). New York: Academic Press, 1966.

Spragg, P. A. The effects of an affective counseling model on the social judgement, emotional discrimination, and maladaptive behavior of mentally retarded adults (Doctoral Dissertation, University of Northern Colorado, 1983). Dissertation Abstracts International, 1983, 44, 445A.

Sternlicht, M. Psychotherapeutic procedures with the retarded. In N. R. Ellis (Ed.), International review of research in mental retardation (Vol.2). New York: Academic Press, 1966.

Ucer, E., Gaalden, G. L., & Mazzeo, A. J. Utilizing film therapy with emotionally disturbed retardates. Mental Retardation, 1968, 6(1), 35-38.

Vance, H., McGee, H. J., & Finkle, L. Group counseling with mentally retarded persons. Personnel and Guidance Journal, 1977, 56, 148-152.

Weisz, J. R. Perceived control and learned helplessness among mentally retarded and nonretarded children: A developmental analysis. Developmental Psychology, 1979, 15, 311-319.

Yepsen, L. N. Counseling the mentally retarded. American Journal of Mental Deficiency, 1952, 57, 205-213.

Zeaman, D., & House, B. J. A review of attention theory. In N. R. Ellis (Ed.), Handbook of mental deficiency, psychological theory and research. Hillsdale: Lawrence Erlbaum Associates, 1979.

Zeaman, D., & House, B. J. The role of attention in retardate discrimination learning. In N. R. Ellis (Ed.), Handbook of mental deficiency. New York: McGraw-Hill, 1963.

Zigler, E. Research on personality structure in the retardate. In N. R. Ellis (Ed.), International review of research in mental retardation (Vol. 2). New York: Academic Press, 1966.

Zisfein, L., & Rosen, M. Personal adjustment training: A group counseling program for institutionalized mentally retarded persons. Mental Retardation, 1973, 11(4), 16-20.